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REMARKS:

1) Entry and consideration of this Response After Final are respectfully requested. This Response does not make any new amendments. This is applicant's first opportunity to reply to the new ground of rejection that was asserted for the first time in the Final Office Action of April 18, 2006. The remarks herein are directly responsive to the new ground of rejection first asserted in the Final Office Action, and do not raise any new issues that would require further search or consideration. Therefore, entry and consideration of this Response After Final are appropriate and are respectfully requested.

2) Referring to page 3 of the Office Action, the allowance of claim 13 is appreciated. Claim 13 has been maintained without further amendment, and should thus still stand allowed.

3) Referring to the top of page 2 of the Office Action, the withdrawal of the previous rejections is appreciated.

4) Referring to pages 2 to 3 of the Office Action, the rejection of claims 1 to 3, 5, 7, 10, 14, 30 and 16 to 31 for failure to comply with the written description requirement under 35 U.S.C 112(1) is respectfully traversed.

The Examiner has asserted that "*it is unclear that the additional information is distinct from the data*" (bolding added). Therefore, the Examiner has asserted that the claimed invention was not sufficiently described so as to reasonably

convey to a person of ordinary skill that the inventors had possession of the claimed invention at the time the application was filed. These assertions are respectfully traversed.

It is a main object of the invention to transfer **more** information in a given time, than would be possible without the inventive method. Particularly, the invention aims to **increase** the information transmission rate. In this regard, for example, see the specification at page 2 lines 30 to 31, page 3 lines 11 to 15, page 8 lines 8 to 11, etc. To increase the information transmission rate, a person of ordinary skill in the art would readily understand that the additional information cannot be the same as the data, i.e. **must be distinct from** the data. Otherwise, one would be transmitting the same **redundant or duplicative** information rather than **more** information in a given amount of time.

The inventive method is thus clearly distinguished from prior art methods that instead aim to transmit data redundantly, i.e. transmit the same data twice in order to provide a redundant accuracy check of the data being transmitted. Such prior art methods do not increase the data transmission rate, but rather increase the transmission accuracy, because the **same** data is transmitted twice to ensure that it can be accurately received by the receiver, and that the accurate reception thereof can be confirmed. In such prior art methods, it is crucial that the same data is transmitted twice, and not that distinct data is transmitted.

In the context of the present inventive method, which aims to transmit more information in a given time, i.e. to increase

the information transmission rate (page 2 lines 30 to 31, page 3 lines 11 to 15, page 8 lines 8 to 11), a person of ordinary skill in the art would have readily understood that "control signals" are distinct from the "coded data words" that are encoded and transmitted in the signal, because "control signals" **control the operation of the receiver**, while the "coded data words" **convey the actual useful data** that is to be used by or further processed in the receiver. This would have been clearly understood from the original disclosure at page 1 lines 12 to 14, page 3 lines 11 to 15, and page 4 lines 9 to 12.

For example, page 3 lines 12 and 13 state that "the information types only have to be partially coded in the form of data words". This means that some of the information is not coded in the form of data words, but rather namely can be conveyed in the modulation indices (page 3 lines 4 to 5).

At page 3 lines 14 and 15, the original disclosure also states "as well as the coded data words, additional control signals can also be transmitted directly by a carrier wave". As mentioned above, a person of ordinary skill in the art would have readily understood that "control signals" are different and distinct information in comparison to "coded data words", because the control signals control the operation of the receiver, while the coded data words convey the actual user data. If the additional information (i.e. the "control signals") would not be understood as distinct from the coded data words, then this sentence would have been written "as well as the coded data words, additional ~~control signals~~ coded data words can also be transmitted directly by a carrier wave". The fact that the

original application text purposely uses distinct terms to identify distinct information items, namely "coded data words" and "control signals", would have been clearly understood by a person of ordinary skill as referring to additional information in addition to and distinct from the coded data words. Distinct terms are understood as having distinct meanings unless they are stated to be non-distinct.

As a further example, at page 4 lines 9 to 13, the original application text states that "a system frequency for decoding the data words, for example, can also be transmitted together with the data words by a carrier wave". This also makes clear that the transmitted "system frequency" must involve additional information in addition to **and distinct from** the "data words", because in fact the system frequency is used for decoding the data words. If the system frequency involved information that was the same as or not distinct from the data words, then the system frequency could not be used for decoding the data words.

Yet another example arises at page 4 lines 14 to 17, where the original text states "the data rate can be variably set without coding with data words". That again makes clear that distinct information can be transmitted separate from and without being coded in data words. Namely, the modulation indices convey additional information in addition to and distinct from the data words to variably set the data rate.

The Examiner has stated "*no information regarding the format or content of these additional control signals is provided to show the additional information is, in fact, distinct from the data*". This assertion is traversed as inapplicable. A patent

specification does not need to define the details of terms that are conventionally understood in the art. The McGraw-Hill Dictionary of Scientific and Technical Terms, Fifth Edition (1994) defines "control signal" (for example) as "a set of pulses used to identify the channels to be followed by transferred data". This dictionary defines "data word" as "a computer word that is part of the data which the computer is manipulating, in contrast with an instruction word". While those definitions are not adopted as exactly applicable in the present application, they demonstrate that a person of ordinary skill understands that control signals or instruction words are distinct from and not the same information as a data word or data being transferred.

As discussed above, a person of ordinary skill in the art understands that the terms "control signals" and "encoded data words" respectively define distinct information items.

Also as discussed above, it is necessary that the control signals must be distinct from the coded data words, in order to achieve the object of the invention, namely to transfer more total information in a given time period. If the control signals were not distinct from the data, then the overall information transmission rate would not be increased. Instead, the transmission of such duplicate information would provide redundancy and thus increased accuracy without an increased information transmission rate.

In view of the above cited text portions of the original written description and additional evidence, it is respectfully submitted that the rejected claims are supported by an adequate written description which would have reasonably conveyed to a

person of ordinary skill, that the inventors had possession of the presently claimed invention at the time the application was filed. Namely, the above discussed portions of the specification demonstrate that the additional information is distinct from the data, as would be understood by a person of ordinary skill.

For the above reasons, the Examiner is respectfully requested to withdraw the rejection of claims 1 to 3, 5, 7, 10, 14, 30 and 16 to 31 as failing to comply with the written description requirement under 35 U.S.C. 112(1).

5) Favorable reconsideration and allowance of the application, including all present claims 1 to 3, 5, 7, 10, 13, 14 and 16 to 32, are respectfully requested.

Respectfully submitted,
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_____ 6/12/06
Name: Walter F. Fasse - Date: June 12, 2006